DOCUMENT RESUME

ED 419 298 EA 029 081

AUTHOR	Patrinos, Harry A.; Ariasingam, David L.
TITLE	Decentralization of Education: Demand-Side Financing. Directions in Development.
INSTITUTION	International Bank for Reconstruction and Development, Washington, DC.; World Bank, Washington, DC.
ISBN	ISBN-0-8213-3930-3
PUB DATE	1997-00-00
NOTE	60p.
AVAILABLE FROM	World Bank Publications, P.O. Box 7247-8619, Philadelphia, PA 19170-8619 (Stock No. 13930; $20).
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Access to Education; *Decentralization; Definitions; Developing Nations; Economically Disadvantaged; *Educational Equity (Finance); Educational Vouchers; Elementary Secondary Education; *Finance Reform; Foreign Countries; Government Role; Minority Groups; Partnerships in Education; Private Schools; Program Effectiveness; School Business Relationship; *School Choice; Sex Differences
IDENTIFIERS	*Demand Side Financing

ABSTRACT

Central governments' supply-side expansions of schooling have not equally benefited all members of society, especially girls, indigenous peoples, tribal groups, disadvantaged minorities, and the poor. Public spending on education is often inefficient, higher education is subsidized at primary education's expense, and costs are becoming insupportable. To tackle such issues, some governments are exploring demand-side financing, whereby public funds are given directly to individuals or institutions on the basis of expressed demand. Use of decentralized, demand-side financing mechanisms (like vouchers and stipends) is common in member countries of the Organization for Economic Cooperation and Development. After defining several mechanisms, this booklet provides some country examples aiming to increase school enrollment: stipends in Bangladesh, community financing in Chad, targeted bursaries in China and Mexico, voucher schemes in Colombia, assistance to private schools serving poor children in the Dominican Republic and Pakistan, student loans in Jamaica, and community grants in Pakistan. Program success depends on beneficiaries' involvement and support, parents' active participation, private-sector schools' involvement, partnerships with commercial enterprises, flexibility, capacity building, cultural relevance, equity principles, and transparent fund transfer formulas. Contains 47 references. (MLH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 419 298

DIRECTIONS IN DEVELOPMENT

Decentralization of Education

Demand-Side Financing

HARRY ANTHONY PATRINOS
DAVID LAKSHMANAN ARIASINGAM

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

J. Feather

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

2

EA 029 081

DIRECTIONS IN DEVELOPMENT

Decentralization of Education

Demand-Side Financing

Harry Anthony Patrinos
David Lakshmanan Ariasingam

The World Bank
Washington, D.C.

© 1997 The International Bank for Reconstruction
and Development/ THE WORLD BANK
1818 H Street, N.W.
Washington, D.C. 20433

All rights reserved
Manufactured in the United States of America
First printing June 1997

The findings, interpretations, and conclusions expressed in this study are entirely those of the author and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent.

Cover photograph by Curt Carnemark, The World Bank.

Harry Anthony Patrinos, an economist with the Human Development Department of the World Bank, has written numerous articles on the economics of education. He is co-editor (with George Psacharopoulos) of *Indigenous People and Poverty in Latin America: An Empirical Analysis* and a principal author of *Priorities and Strategies for Education: A World Bank Review.*

David Lakshmanan Ariasingam, a consultant with the World Bank's Environment Department, has worked for the World Bank, the U.S. Agency for International Development, and other organizations on education issues, including community financing, decentralization, curriculum development, and private sector investments in education. He is currently working on projects on environmental education, awareness, and training.

Library of Congress Cataloging-in-Publication Data

Patrinos, Harry Anthony.
Decentralization of education : demand-side financing / Harry Anthony Patrinos, David Lakshmanan Ariasingam.
p. cm. — (Directions in development)
Includes bibliographical references.
ISBN 0-8213-3930-3
1. Education—Developing countries—Finance.
2. Federal aid to education—Developing countries.
3. Educational vouchers—Developing countries.
I. Ariasingam, David Lakshmanan, 1963– . II. Title.
III. Series: Directions in development (Washington, D.C.)
LB2826.6.D44P38 1997
379.1'2'091724—dc21 97-15317
CIP

Contents

Foreword v
Acknowledgments vii

1 Demand-Side Financing Explained 1
Demand-Side Financing Mechanisms 2
From Theory to Practice 4
Debate over Choice in the United States 7
Education, Values, and Choice 10
Education, Ethnicity, and Politics 11
Applying Demand-Side Financing: Country Context Issues 12
Review of World Bank–Financed Projects 14

2 Demand-Side Financing Tools 18
Definitions of Mechanisms 18
Country Examples 20

3 Lessons Learned 43
Specific Recommendations 43
Disbursement and Monitoring 45
Need for Evaluation 46

References 47

Foreword

The World Bank, in collaboration with ministries of education and ministries of finance, has tested innovative demand-side financing mechanisms in recent education projects. This book, part of a larger effort in the Education Group of the Human Development Department to examine alternative methods of financing education in developing countries, reviews World Bank education projects that became active from 1993 to 1996. The analysis is limited to projects with demand-side financing components and is based on World Bank staff appraisal reports. Demand-side financing refers here to the channeling of public funds directly to individuals, institutions, and communities on the basis of expressed demand. It may also mean resource mobilization by beneficiaries for identified needs.

Demand-side financing is a pragmatic choice for introducing needed reforms according to local needs and available resources. The book is designed to assist policymakers and practitioners in developing countries, as well as staff members of international organizations interested in exploring alternative financing mechanisms. It is hoped that this review of education projects will shed some light on the appropriate role of demand-side financing in education, but more important, that it will spur research on this topic in developing countries.

David de Ferranti
Director
Human Development Network
The World Bank

Acknowledgments

To conduct this study, the authors reviewed World Bank projects with a demand-side financing component and contacted project task managers for further information. After these initial consultations, projects were selected to put together a survey that represents the various demand-side financing mechanisms used in World Bank–financed education projects.

Special thanks go to the following for providing advice, needed information, and observations from the field: Albert Aime, Ivar Andersen, Jill Armstrong, Halsey Beemer, Penelope Bender, Ernesto Cuadra, Alfonso de Guzman, Makha Ndao, Guilherme Sedlacek, Eleanor Schreiber, Manuel Vera, Eduardo Velez, Joel Reyes, and Ana Jeria. We are grateful to Maris O'Rourke, senior education adviser, for providing general guidance, and to Marlaine Lockheed for including this book in the Decentralization of Education series.

Many individuals commented on drafts and exchanged ideas with the authors. Among them were Mark Bray, Jack Maas, Soniya Carvalho, Stephen Heyneman, Jacques van der Gaag, Vicente Paqueo, Estelle James, Charles Griffin, Marlaine Lockheed, Vicente Fretes-Cibils, George Psacharopoulos, Peter Moock, Meskeram Mulatu, Yang-ro Yoon, Nicholas Prescott, Paul Shaw, Donald Winkler, Minh-Chau Nguyen, Emmanuel Jimenez, Elizabeth King, Laura Rawlings, Nicholas Burnett, Kari Marble, Indermit Gill, Sverrir Sigurdsson, Andrew Mason, Jee-Peng Tan, Xiaoyan Liang, Ralph Habison, and Joanne Salop. Many thanks to Eluned Roberts-Schweitzer for overseeing the publication process and to Ian Conachy, Anca Novacovici, and Timothy Scanlon for providing word processing and research. American Writing Corporation edited and laid out the text.

1
Demand-Side Financing Explained

Most governments recognize the importance of education for economic and social development, and are increasingly investing larger shares of their budgets accordingly (World Bank 1995). There is no doubt that the drive to offer basic education has been remarkably successful. However, it is also clear that there is an unfinished agenda in terms of access, equity, and efficiency.

Governments largely determine and finance the provision of schooling with central governments intervening in regional and community education systems. The main product has been an immense national expansion of schooling, largely the result of supply-side expansion. That is, governments build schools and pay teachers. This expansion has not benefited all members of society equally, however, and in many cases the type of schooling offered is inappropriate for children from certain backgrounds. Girls, indigenous peoples, tribal groups, disadvantaged minorities, and the poor are, to a large extent, left out. Furthermore, the needs of children with learning disabilities, children with physiological and psychological problems, and children without homes have not been met.

The disparities between girls' and boys' enrollment and primary school completion rates are staggering. In 1990 the average 6-year-old girl in a low- or middle-income country could expect to attend school for 7.7 years, up from 6.7 years in 1980; the average 6-year-old boy could expect 9.3 years of education. The gap between boys and girls is widest in South Asia, where in 1990 a girl could expect 6.0 years of schooling and a boy 8.9 years, and in the Middle East, where a girl could expect 8.6 years and a boy 10.7 years (World Bank 1995).

There is also a wide gap in terms of educational services made available to urban and rural populations. In Indonesia 3 percent of urban children of primary school age did not receive any schooling, as opposed to 10 percent in rural areas (World Bank 1995). Gender disparities in rural areas are acute. In Pakistan the proportions of female and male children ages 7–14 who ever attended school were 73 and 83 percent in urban areas, compared with 40 and 70 percent in rural areas.

Many linguistic minorities and indigenous peoples are underserved. In Guatemala 80 percent of the rural indigenous population is illiterate, and indigenous males in the labor force have, on average, less than 2 years of schooling. In the rural areas of Peru 70 percent of Quechua-speaking indigenous people ages 5 and older have never been to school, compared with 40 percent of nonindigenous Peruvians (Psacharopoulos and Patrinos 1994).

In addition, public spending on education is often inefficient, a result of misallocation. Although spending on basic education ought to be the priority in countries that have yet to achieve near-universal enrollment at the primary and lower-secondary levels, many countries continue to oversubsidize higher education. In Africa, for example, spending per student is about 44 times on higher education than on primary education, and the share of higher education in total public spending on education is now higher than that in any other region of the world.

The supply-driven expansion of schooling has run into further trouble recently as governments are less able to bear the increasing cost of expanding public education systems. The relevant questions are: who should pay for schooling, who should support public and private education, and what share of the total cost should be borne by taxpayers rather than by direct beneficiaries (Cohn and Geske 1990)? These questions lead to a discussion of whether public subsidies, if justified, should be given to educational institutions or to individuals in the form of voucher-type schemes. At present, education is financed largely by public funds. In many countries even private schools are heavily dependent on public assistance.

Demand-Side Financing Mechanisms

In an attempt to tackle these issues, some governments are exploring new ways of channeling available funds. One such method is demand-side financing, whereby public funds are given directly to individuals or to institutions on the basis of expressed demand. In other words, money follows students. The use of demand-side financing mechanisms, such as vouchers, stipends, and capitation grants, does not necessarily imply less public finance. The use of these mechanisms in the education sector is common in member countries of the Organization for Economic Cooperation and Development (OECD) and in developing nations (tables 1 and 2). A voucher is a payment that a public entity gives directly to students and that students use at the school of their

choice. Stipends are given to students or their families to pay for schooling-related expenditures. More detailed explanations of these and other demand-side financing mechanisms are given below.

Part of the conceptual framework of demand-side financing in education is the issue of choice. The focus is on the individual (or parents, in the case of basic education). In fact, the calls for parental choice are usually directly related to efforts to improve educational outcomes. According to *The World Bank Participation Sourcebook* (World Bank 1996), efforts to make the provision of education more responsive to community needs should include education vouchers for families. The importance of improving educational outcomes is highlighted in the World Bank's education sector review, *Priorities and Strategies for*

Table 1. Demand-Side Financing of Education in Developing Countries (Non–World Bank Projects)

Country	*Mechanism*
Belize	Government partnerships with churches (government financially supports church schools on the basis of need).
Brazil	Matching-grant schemes and capitation grants based on number of students, socioeconomic status of students, and location.
Botswana	Matching-grant schemes (government covers capital costs in junior secondary schools).
Chile	Voucher system for poor students, capitation grants for all students.
China	Matching-grant schemes.
Gambia	Voucher system for poor students, capitation grants for all students.
Guatemala	Targeted stipends for girls in thirteen communities.
Ghana	Matching-grant schemes (formula includes matching grant equivalent to amount raised by parent-teacher associations).
India	Matching-grant schemes and numerous incentives (uniforms, textbooks, attendance allowances).
Lesotho	Government partnership with churches (government financially supports church schools on the basis of need).
Mauritius	Matching-grant schemes.
Myanmar	Community-sponsored schools.
Morocco	Scholarships for rural girls.
Mozambique	Scholarships for rural girls.
Poland	Assistance to private schools.
Tanzania	Matching-grant schemes.
Thailand	Bicycles for poor students in rural areas (based on transportation needs).
Zimbabwe	Per capita grants.

Source: Bray 1996; Fiske 1996; West 1996; World Bank 1995.

Table 2. Examples of Demand-Side Financing in Education in OECD Countries

Country	*Mechanism*
Australia	Revenue-sharing formulas to offset fiscal disparities in state governments' budgets; block grants relative to poverty and number of students; assistance to private schools, amount based on need.
Canada	Capitation grants and assistance to private schools.
Japan	Assistance to private schools.
Netherlands	Capitation grants.
New Zealand	Higher unit level of funding for poorer students (80 percent of funding related to number of students and 20 percent to student socioeconomic status).
Sweden	Capitation grants.
United Kingdom	Assistance to private schools (places for low-income students).
United States	Voucher experiments.

Source: OECD 1994; West 1996.

Education (World Bank 1995), along with a call for greater participation in the financing and governance of education, and in decisionmaking. The issues surrounding the introduction of choice are addressed here without taking sides in what has become an inflammatory subject. To many, demand-side financing is a pragmatic choice for introducing needed reforms according to local needs and resources. For example, in the United States the problem is quality, in Yemen it is lack of capacity, and in Chile it is equity. It is important to consider the country as a whole and to introduce financing mechanisms according to needs. For example, in Bangladesh it was appropriate to provide stipends for girls at the secondary level. In the United States the G.I. Bill, a financial incentive for discharged military personnel to pursue higher education, was a very successful program that enabled veterans to afford a college education.

From Theory to Practice

While it is generally agreed that choice has merit in theory, how to make it work best in practice is more difficult to determine. It is often argued that vouchers and school choice will increase vital access to information and thus help in promoting equity. However, we know very little about the effects of choice on learning, the practicality of

implementing choice, the level of education at which choice is most appropriate, or how to administer such approaches. We also do not know what the supply-side responses will be to interventions on the demand side. For example, will private education suppliers emerge or expand because of vouchers? Will public institutions reform themselves in order to attract choice pupils?

The main argument for public finance is equity. But there is no consensus on whether equity refers to resources, student achievement, or future income, or whether the goal is equal opportunity among persons, regions, or states. Vouchers, proponents argue, are public funds that should be given directly to students or their families, who will then decide where to enroll. Proponents claim that vouchers will make the education system more efficient, improve quality, increase access, and enhance equity. Those opposing such proposals focus on the poor, arguing that they are not able to make the right choices and that a voucher-based educational finance system will increase social stratification. For poor countries or rural areas, critics argue, the debate over the choice is irrelevant; they claim that there can never be more than a few schools in a village and there is, therefore, no point in instituting a voucher scheme.

However, even when there is only one school, parents are making choices. Given high levels of poverty and a low-quality education, parents may choose not to send their children to school. In some countries enrollments continue to decline (World Bank 1995). But public school teachers usually continue to be paid, even when they do not show up for class. Therefore, the choice issue is not irrelevant in rural areas.

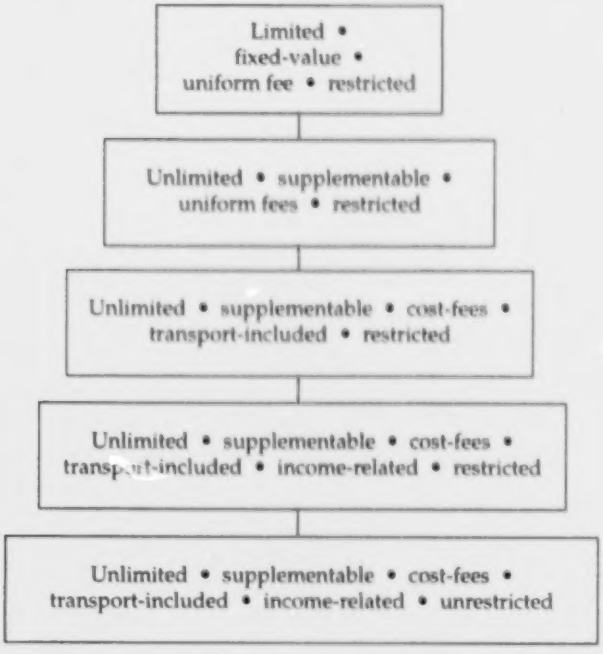
Demand-side financing tools can encourage choice, even when the money is delivered to communities rather than to individuals. In such a scenario it is up to the community to ensure that schooling investments are made in order to attract parents. Communities may decide to institute some sort of voucher program on their own.

The debate, however, is tainted with a lack of clarity and a host of different definitions of vouchers. Figure 1 shows how much vouchers differ and the varying effects they can have on children whose families have limited income. Even here, Blaug (1984) warns readers that the voucher tree does not capture all the nuances that may be conveyed by a particular interpretation of the concept of education vouchers. There is a great variety of voucher plans and they can differ on three dimensions: finance, regulation, and information (Levin 1980, 1991). One extreme is listed at the top—a restricted voucher. The other extreme is an unrestricted voucher that includes fees, costs, and transport and is income-related.

A limited voucher allows parents to choose among public schools. In effect, it simply amounts to the dezoning of schools. An unlimited

voucher implies that parents can choose among public, private, and religious schools. However, most private schools charge fees that may exceed public unit costs. Parents, therefore, must be allowed to supplement the value of the voucher. In many cases the costs of even public schools vary significantly. If the state enables public schools to charge fees to cover their costs, and enables parents to top up vouchers in public as well as private schools, the scheme is one of cost-fees vouchers. But a system of unlimited, supplementable, cost-fees vouchers would not increase choice for all parents unless transportation costs were covered. Furthermore, to increase equity, it is also necessary that the voucher's value be related to family income. This can be done by taxing the voucher or reducing the value of the voucher in direct proportion to declared income. Restricted vouchers imply that schools are not permitted to bar admissions on any grounds other than academic. When schools are free to bar admissions on grounds other than strictly educational ones, vouchers are categorized as unrestricted.

Figure 1. Voucher Tree


Limited • fixed-value • uniform fee • restricted
Unlimited • supplementable • uniform fees • restricted
Unlimited • supplementable • cost-fees • transport-included • restricted
Unlimited • supplementable • cost-fees • transport-included • income-related • restricted
Unlimited • supplementable • cost-fees • transport-included • income-related • unrestricted

Source: Blaug 1984, 164.

Education vouchers may be assessed according to six criteria: parental freedom, cost-effectiveness, diversity, innovation-mindedness, the level of total educational expenditures, and equality of educational opportunities. The debate over these criteria has not produced definite conclusions. In fact, participants in these debates cannot even agree on what is meant by freedom of choice, efficiency, diversity, and equity (Blaug 1984).

Because of constitutional provisions, school choice experiments in the United States have not included religious schools. Choice is considered mostly in the context of public schools. This removes parental preference for certain kinds of influences and values, especially for poorer families, who cannot opt out of the public school system. However, as will be shown below, recent experiments launched during the 1996/97 academic year will finally allow parents to choose private or religious schools.

Debate over Choice in the United States

Because the U.S. constitution stands against the entanglement of church and state—a constraint not present in some developing countries—caution is needed in transferring lessons from the United States to other countries. Still, it is hoped that by discussing some of the literature on U.S. voucher schemes some light may be shed on the debate at hand.

Often, it is the poor who would benefit most from the opportunity to choose schools. A study conducted in 1992 under the auspices of the Reason Foundation in California (Beales 1992) found that 52 percent of those surveyed would use a $2,600 voucher to send their children to private schools. Enthusiasm for vouchers was found among minorities, especially among African Americans; two-thirds of African American parents with school-age children and about 58 percent of all minorities, including Latinos and Asians, indicated that they would use the vouchers. What is also noteworthy is that the greatest support expressed for such a program came from households earning less than $25,000 per year (Beales 1992; see also Hoxby 1996).

According to its proponents, choice will generate greater competition and therefore improve school efficiency and achievement. A central point is that there are enormous costs involved in tax collection, 50 cents to 80 cents per dollar, which swings the efficiency debate in favor of private schools (West 1991). Most studies find that public education is more costly than private education (see, for example, Lott 1987). In fact, it has been argued that public schools have reduced choice by squeezing out potential competitors through a monopolization of education (Peterson

1990). Another finding of the Reason Foundation study is that if the 52 percent who would use a voucher to send their children to private schools carried out their intentions, savings to the state of California would equal $3 billion, almost 14 percent of the state education budget (Beales 1992). Therefore, according to that study a voucher program would break even if only 17 percent of students crossed over to private schools.

However, there is a caveat. The savings are all earned at the state level, not at the district level. For a voucher program to be efficient at the district level, the number of students who leave district schools to attend private schools must be large enough to reduce fixed costs (buildings, transportation, libraries, and debt repayments).

Under one scenario choice would replace the current mode of stratification by income and race (which also induces residential homogeneity and exclusivity) with stratification based on student performance and behavior (Coleman 1992). Colleges and universities use this basis for their admissions policies. Coleman argues that parents should have the right to choose the type of education best suited for their children, especially regarding philosophic and religious values. Even when presented with their preferred type of school, families should still be able to choose the school that best fits the specific educational needs of the student (Coleman 1992).

However, there is disagreement over the likely impact of market choice. Levin (1992) points out that there is a limited market within the independent school sector and a limited number of those with the ability to pay. He argues that there are two possible options when it comes to choice: market choice and public choice. Under a system of market choice, which may include tuition tax credits or vouchers, both private and public schools compete for students. Each child receives a voucher that can be used to pay a specified amount of the tuition fees. However, in a public choice system the government always pays for schools that it also operates, though there may be some functions contracted out. The market approach is thought to produce superior private benefits, while the public approach is thought to produce superior social benefits. The market system satisfies private tastes and is slightly superior in terms of student achievement.

When the issue of choice is moved from the abstract to the concrete, complications arise (Boyd and Kerchner 1988). Even choice advocates, such as former U.S. Secretary of Education William Bennett and his followers, are equally vocal about the need for a standard curriculum for elementary and secondary schools. Calls for greater school choice in the United States come from the same sources that single out Germany and Japan as exemplars of educational success, even though both countries' education systems allow less choice than in the United States.

There is also disagreement over the objectives of education. Advocates of choice assume that the societal purpose of education is satisfied when families choose education on the basis of their own tastes and judgments. However, schooling is essential for democratic societies; it preserves and supports political, social, and economic institutions and enables democratic changes. Students must therefore have a common educational experience, not one particular to individual or family choice. This is the crux of the dilemma. Education is at the crossroads of two competing interests—the right of parents to choose experiences, influences, and values for their children, and the needs of a democratic society. The challenge, therefore, is to provide a common experience but allow for some range of choice (Levin 1991).

Given this challenge, Levin (1980) argues that the promotion of public schooling alternatives may be a better approach to choice. Voucher plans can differ in three areas: finance, regulation, and information. Various combinations of these may have differing effects on the poor. For example, transportation allowances may help the poor, while "add-ons," as proposed by Friedman (1962), may adversely affect the poor. Add-ons are private funds added to the value of vouchers given by a public entity—"supplementable" vouchers, to use Blaug's (1984) terminology. Information on add-ons would have to reach all people equally to ensure fair choice. Regulations would have to be tailored in terms of curriculum, personnel, and, importantly, admissions.

Many improvements can be made to this system by creating meaningful parental governance to make schools more responsive to the specific needs of students. Improvements may include practicing open enrollment, creating "magnet" schools to reduce segregation, establishing mini-schools within existing school buildings, permitting high school students to take classes in local postsecondary institutions, and providing "mini-vouchers" that students can use for selected courses, such as enrichment programs in music, pottery, and weaving.

Market-oriented choice may require unusual amounts of regulation that would be costly and cumbersome to maintain and enforce (Murnane 1986). Private school costs may be underestimated because studies do not calculate the free services given by clergy, nor do they take into account contributions from fundraising (Sullivan 1981). Some argue that private schools hire less experienced teachers and pay lower salaries (Chambers 1985). There will also be an additional cost to society in order to ensure adequate educational results (Krashinsky 1986)—the information challenge. Under the market system more information is necessary because of change, and dissemination of the information will be costly. The overall costs of sustaining the information, regulation, and other parts of the market system while providing at least a

minimum level of social protection could be very high relative to a public choice approach (Levin 1991).

Recent court and legislative decisions may point toward more choice becoming available to students in public schools. In Ohio the Cleveland Scholarship Program has set aside public funds to enable 2,000 low-income students to attend private and religious schools beginning in the fall of 1997. In Milwaukee, after findings of academic improvement among students involved in the nation's first choice program, the Wisconsin legislature approved the expansion of the program to include religious schools. However, the two main barriers to experimentation still remain: legal (constitutional) and political (in the form of teacher unions).

Milwaukee sponsored the first publicly funded school choice program in the United States, providing low-income parents with vouchers that could be used to send their children to private, secular schools. Witte (1996) evaluated the school choice experiment and found that thus far choice has not led to more effective schools. There is no evidence of an increase in student achievement. However, reanalysis of the data has led Greene and others (1996) to conclude that "attendance at a choice school for three or more years enhances academic performance, as measured by standardized math and reading test scores." The data used are derived from a natural experiment that randomly assigned students to a test or control group. The authors of the recent study claim that Witte and his researchers did not employ appropriate analytical techniques; instead, they focused on comparisons between choice students and a much less disadvantaged cross-section of public school students. Greene and others (1996) claim that no valid conclusions can be drawn from the comparisons Witte conducted. The debate continues, but see Rouse (1997) for a recent reevaluation of the evidence, which finds that choice leads to gains in math, but not in reading.

Education, Values, and Choice

Three countries—Australia, Denmark, and Holland—have been providing choice for many years, although several other countries (such as Belgium, Canada, France, Ireland, Japan, and Spain) have provided public funding for private schools (Doyle 1984). Unlike in the United States, the concern over entangling church and state is dealt with by providing financial assistance to private and religious schools, not by denying assistance.

Before drawing lessons from these systems, we must consider the ways in which choice is made available within the public school system

in most industrial and developing countries. Usually, choice is granted through the passage of examinations at different educational levels. These examinations become progressively more difficult as the number of places available become more scarce—that is, more limited because of real budgetary concerns. The system, then, includes elite public schools that, in turn, present students with choice.

Denmark saw a renewed interest in free public education in the early years of the nineteenth century. In 1814 the government introduced seven years of compulsory education. The notion of "compulsory" meant that people were free to educate their children as they saw fit as long as children received instruction in the principal subjects. Still today, any group of parents can claim public funding as long as they have at least twenty-eight children to start a private school. The Danes preserve religious freedom by providing public funding to both religious and nonreligious schools (Doyle 1984; OECD 1985).

In Australia, where the constitutional article on religious freedom was adopted verbatim from the first amendment to the U.S. constitution, this issue is dealt with in schools very differently than it is in the United States. The Australian High Court upheld the government program of aid to religious schools as long as the Australian government was scrupulously neutral and treated all religions equally. In Australia today all private schools receive some form of government support, but the poorest receive more aid. Private schools are not regulated, but they are held to the same standards as public schools. All schools are held to standards of performance. Public schools have taken vigorous measures to make themselves more attractive to students. One of the measures initiated is a comprehensive, statewide open enrollment policy to offer some choice to students.

In the Netherlands a century ago one-third of all Dutch children attended public schools. Today the number is reversed in favor of private schools. Most private schools there are religious institutions—private secular schools are an exception. Schools receive public funding, but in order to qualify for funding, the government requires that they meet three conditions: teachers must be licensed, a set core curriculum must be taught, and students must meet academic standards.

Education, Ethnicity, and Politics

The need to reform primary and secondary education in the United States arises because of current defects and because of the technological and political revolutions of the past few decades (Friedman 1995).

These revolutions not only promise a tremendous increase in world output but also pose a threat in that serious social conflict may arise from a widening gap between the highly skilled and the unskilled. Friedman points to education as the way to stave off this social conflict. There is a need to radically reconstruct the education system, which is the only major force capable of offsetting the tendency for increased social stratification. According to Friedman this reform can come about only by privatizing a major segment of the educational system—a gradual, yet substantial, transfer from government to private enterprise achieved by implementing a voucher system. This will allow parents a degree of choice.

An example demonstrating the limitations of school choice may be found in the countries of the former Soviet Union, especially Russia. Marginalized ethnic groups, such as Koreans, Germans, Jews, Cossacks, Buriats, and Georgians, are now able to voice their opinions. These minority groups have as a priority the inclusion in the curriculum of some mention of the oppression they suffered. Of course, this inclusion will entail a discussion of the potential perpetrators of crimes against their people—presenting grave possibilities for ethnic strife (Heyneman forthcoming). This looming hazard may be one of the practical difficulties associated with increasing choice in education. Ethnic differences may lead to ethnic instability. School choice is more than just an educational issue. One may conclude that education choices must be seen in a larger social, political, and economic context.

Applying Demand-Side Financing: Country Context Issues

In most developing countries choice and vouchers, as usually defined in most industrial countries, may not be relevant financing tools. But influencing the demand side—that is, affecting the variables that control individual and family decisions on the demand for education—with various means, including financial, is of the utmost importance.

The demand for schooling is influenced by economic, political, social, and cultural factors. In many cases it is not sufficient merely for a school to exist. Even "free" education may not entice poor families. Households and individuals determine the demand for schooling by an implicit cost-benefit analysis. Parents will not send their children to school if the expected benefits do not exceed the costs—direct and indirect—associated with school attendance.

The returns to schooling are affected by many factors. There is only so much that education policy or the method of financing education can do. Macroeconomic conditions, for example, are very important, as is the level of personal disposable income and the unemployment rate. Even when the returns to schooling are high, some poor families may not be able to afford the direct or indirect costs of schooling. The direct costs include fees, books, and materials. Indirect costs include foregone earnings. Although the social returns may be high, because of excessive private costs, many poor families may not be able to invest in schooling. This may be the case in countries such as El Salvador, Guatemala, Nigeria, and Uganda, which show high estimated social rates of return to primary education but have less than universal primary education enrollments (World Bank 1995; Psacharopoulos 1994).

Demand-side financing mechanisms can be used to help poor families invest in schooling. In large measure this can be accomplished by reducing official tuition charges, but more may need to be done. For example, many school systems charge other fees associated with school attendance. Demand-side mechanisms can compensate poor families for these charges (table 3). And when direct compensation is not enough, some of the opportunity costs can be covered. For example, poor families may receive vouchers that they can cash as long as their child is enrolled in school.

In some cases financial incentives are not enough. Parents may continue to undervalue the education of their children, particularly that of girls. In such cases it may be wise to combine financial incentives with social incentives, such as social marketing of the benefits of girls' education. Social marketing, which is a demand-generation intervention, may have very high social returns for the community. Other demand-side interventions include bilingual education for linguistic minorities and curriculum changes for previously excluded population groups.

At different levels of schooling, different financing tools are more appropriate (table 4). Demand-side financing mechanisms must be considered in the context of a country's entire education system; they are not panaceas. The level of education must also be considered. Consequently, choice mechanisms should be considered pragmatically as one tool among many to bring about workable education reforms suited to the educational level and local resources and needs. Like other tools, choice mechanisms can be used wisely or ineptly (Henig 1994). A successful example of demand-side financing is the G.I. Bill in the United States, which addressed the special needs of soldiers returning from war who wanted to obtain a higher education to help them secure employment in the civilian marketplace. Another demand-driven example is the Head Start early childhood program in the United States.

Table 3. Implementing Demand-Side Finance and Demand-Generation Incentives

Problem	*Demand-side finance and generation incentive*	*Issues to consider during implementation*
Direct costs	Tuition waiver / fee exemption;	Schools may charge other fees
	Student loans	Need a functional loan collection system
	Mixture of private funding and government grants	Mix must not have negative impact on poor students
Indirect (opportunity) costs	Vouchers	Selective admission policy, socially divisive, transportation costs
	Scholarships	Scholarships may be misused; school may increase tuition and fees.
	Stipends	Stipends may be misused or may not reach target group because of local politics
Infrastructure	Community financing	Sustainability
Low valuation of school investments (in girls, for example)	Social marketing	Marketing must reach target population
Language	Bilingual education	Some languages may be left out; socially divisive
Distance	Community grants	Sustainability
Exclusion	Curriculum change	Too much watering down of curriculum or movement away from core curriculum; socially divisive

Source: Authors' compilation.

Over the past 30 years it has served approximately 15 million low-income children (Young 1996).

Review of World Bank–Financed Projects

World Bank clients have used innovative demand-side financing mechanisms in recent education projects. Here, we review World

Table 4. Demand-Side Financing Options by Level of Education: A Partial Listing

Problem	*Primary*	*Secondary*	*Higher*
Quality	Vouchers Targeted bursaries	Vouchers Targeted bursaries	
Management capacity	Community financing Community grants Foreign aid Mixture of private funding and government grants	Funding and government grants Foreign aid Mixture of private funding and government grants	Foreign aid
Efficiency	Parental financing Vouchers	Parental financing Vouchers	Parental financing
Equity	Assistance to private schools Stipends Scholarships Targeted bursaries Deficit financing Taxes Earmarked taxes	Vouchers Stipends Scholarships Taxes User charges Earmarked taxes	Student loans User charges Scholarships

Source: Authors' compilation.

Bank–financed education projects that became active in 1993–96. The analysis is limited to those projects with demand-side financing components.

This review is not critical or evaluative; rather it is an overview. It demonstrates that demand-side financing is feasible and present in developing countries. More in-depth case studies on the Balochistan, Pakistan, and Bangladesh projects are available in Patrinos, Ariasingam, and Liang (forthcoming). That study also discusses issues of evaluation more fully.

The OECD has evaluated school choice experiments in several countries and has concluded that governments may need to promote school diversity as much as choice to avoid the pitfalls associated with choice. Based on a review of school choice in Australia, England, the Netherlands, New Zealand, Sweden, and the United States, OECD (1994) finds that choice may increase social stratification: school choice may be advantageous for more privileged groups in society, who are better prepared to exercise that choice. However, this system does not work well when many choices cannot be satisfied because preferences are concentrated on a few schools. The review also finds

Table 5. Demand-Side Financing in Education Projects Included in This Review

Country and year	*Project*	*Total cost ($million)*
Bangladesh, 1993	Female Secondary School Assistance	88
Chad, 1993	Basic Education	34
China, 1994	Basic Education in Poor and Minority Areas	192
Colombia, 1993	Second Education	150
Dominican Rep., 1995	Second Basic Education	100
Jamaica, 1996	Student Loan	38
Mexico, 1994	Second Primary Education	617
Pakistan, 1993	Balochistan Primary Education	330
Pakistan, 1995	Northwest Frontier Province Primary Education	539

n.a. Not available.
Source: Staff appraisal reports.

that there is much that governments can do to make choice work, including injecting capital into popular schools so that they may expand and provide disadvantaged groups with more information and extra resources.

The projects that are discussed in this paper do not constitute an exhaustive list (table 5). While this report was being prepared, several innovative education projects were initiated, for example, in Indonesia, Tanzania, and, in the training field, Kenya (see Patrinos, Ariasingam, and Liang forthcoming).

Credit ($million)	*Demand-side financing mechanism*	*Demand-side financing cost ($million)*	*Annual unit cost of demand-side financing component ($)*
68	Stipends for girls	42	12–36
19	Community financing	1	240 (per teacher)
100	Targeted bursary for poor and minority children, and free textbooks	30	79
90	Targeted bursary; voucher system	8	143
89	Assistance to private schools serving low-income students	4	n.a.
29	Student loans	29	300
412	Targeted bursary for poor and indigenous populations	412	n.a.
106	Scholarships for communities and voucher-like schemes	1	4
150	Subsidies to private schools serving low-income, rural girl students	1	3

2
Demand-Side Financing Tools

The first section of this chapter introduces the demand-side financing tools employed in World Bank–financed projects discussed in this review. The purpose is to capture the essence of these tools using simple working definitions. Specific examples are described in the second section of the chapter.

Definitions of Mechanisms

For the purposes of this review a *stipend* is a cash payment that a public agency makes to a family to offset schooling expenses for a child. Core expenses such as books, tuition, and transport, and incidental expenses such as materials, game fees, and clothes are covered. A stipend is also used to compensate families for the loss of the child's labor. In other words, it can cover opportunity cost. In many cases there is no school choice involved. Rather, the stipend becomes a mechanism that enables poor children to attend school. This mechanism is particularly effective in enabling girls from poor rural families to attend school. An example of a project that has used this financing mechanism is the Bangladesh Female Secondary School Assistance Project (Patrinos, Ariasingam, and Liang forthcoming).

Community financing can occur through monetary contributions or through nonmonetary support in the form of land, labor, materials, and social marketing of the benefits of education. In the Chad Basic Education Project community financing is used to build parent-teacher associations, which play a vital role in towns and villages.

Targeted bursaries are cash payments that may go directly to schools, municipalities, or provinces and are earmarked for specific purposes, such as improving the curriculum or increasing school access for minority, indigenous, or poor children. They are not given to the students or their families but are made available to the financial officer or the relevant bursars. In the China Basic Education in Poor and Minority Areas Project funds are directed to the bursars of these areas to be used specif-

ically for poor and minority educational needs. In the Mexico Second Primary Education Project bursaries are targeted to help indigenous students pay for textbooks and other learning materials. Related to targeted bursaries are school improvement funds, which are used in education projects in Armenia, Chile, India, and Paraguay. Such funds are usually provided on a competitive basis to initiatives locally designed to promote increased school participation and autonomy. These goals are accomplished by allowing schools to decide on whom, where, and when to spend additional resources.

A *voucher* is a cash payment given by (in most cases) a public entity directly to students. However, definitions vary widely. With vouchers there is an element of school choice involved, unlike with stipends. Schools may charge more than the value of the given vouchers or use them as the only form of payment. There may be regulations on admissions, the curriculum, and personnel, and there must be equal access to information on schooling alternatives so that the market can work properly. Students may submit vouchers to the school of their choice. In some cases students may use the vouchers to attend a special school, such as one that specializes in music or art. The voucher mechanism can be a way in which a student from a nonprivileged background escapes a poor-quality neighborhood school or moves to a school that is more appropriate culturally. A voucher plan that considers such things as transportation, access to information, and admissions criteria, and alters the voucher amount according to family income will help the poor in that all of these adjustments are made specifically to alleviate problems the poor encounter in gaining access to schools. The Colombia Secondary Education Project is a voucher program that promotes opportunities and choice for poor children by giving them direct funds in the form of vouchers.

Access to private schools is an important element of choice. Giving the poor access to private schools promotes equity. Therefore, *public assistance* to private schools can increase choice and improve equity if combined with measures that increase the poor's access to private schools. This funding mechanism is like a voucher but is given to private institutions depending on the number of poor students they take in. Thus it is also like a capitation grant. Public assistance to private schools can come in many forms. In some countries public assistance is in the form of teacher and staff emoluments. In others it is subventions for materials, maintenance, transportation, and equipment. In the Dominican Republic Second Basic Education Project the government is subsidizing private schools that serve children from low-income families. Basically, the government finances private provision of schooling targeted to the poor.

Student loans are used to help defray costs to the government and also to help a greater number of students receive a higher education. Loans can be in the form of commercial private loans or government-guaranteed student loans. The government may take an active role by selecting candidates or establishing regulations. In the Jamaica Student Loan Project the government makes funds available for students by enlisting the help of commercial banks. It also provides the necessary loan guarantees.

Community grants are given to a community of students in a lump sum but are tied to attending a community-created institution. The term voucher-like is sometimes used because the amount of money is related to the number of students, and the approach has an element of choice. Parents choose to send their children to the community school, thereby making the community school eligible for cash payments. Payments may cover some expenses or the full cost of schooling. In Balochistan payments take the form of grants for girls to attend community schools. There, grants are used to address gender equity issues by giving the scholarships in lump sums to the schools that girls attend.

Related to this definition of community grants are *social funds*, special agencies that have investment programming powers. Social funds solicit proposals from public, private, or community groups. By definition, this approach to development is demand-driven. Some social funds are designed explicitly to achieve a level of demand orientation. They offer clients a range of options from which to choose, provide information to help clients make informed choices, and require evidence of commitment and interest, usually through cash or in-kind contributions or management of operations. Demand orientation ensures sustainability, as does evidence of commitment (Carvalho 1997). Bolivia's Social Investment Fund has furthered the efforts of nongovernmental organizations (NGOs) and church-supported agencies to bring schools and other social services to many remote rural areas (van der Gaag 1995). In some regions social funds provide funding for education and other social services; examples include Armenia's Social Investment Fund and Ethiopia's Social Rehabilitation and Development Fund.

Country Examples

The following section introduces the various tools in demand-side financing, using as examples World Bank–financed education projects. The mechanisms, achievements, and problems are shown.

Stipends: Bangladesh

Bangladesh spends 2.2 percent of its gross national product (GNP) on education. (The average for developing countries is 3.8 percent and for industrial countries, 5.8 percent.) In 1992 the country's total education budget was 12.5 percent of the national budget. From this allocation 55 percent goes to primary education and 22 percent to secondary and tertiary education. Education among women in Bangladesh is among the lowest in the world. For ages 5 and above, women's national literacy rate is 20 percent. In 1991, 1.9 million girls ages 6 to 10 were not enrolled in primary school, and 6.9 million girls ages 11 to 16 were out of secondary school.

The Female Secondary School Assistance Project (FSSAP) aims to increase access to secondary education. The 1989 Labor Force Survey shows that 91 percent of all rural girls are working as household helpers, revealing a very high opportunity cost for education that is clearly linked to poverty. The total cost of the project is $88 million, of which the International Development Association (IDA) has provided a credit of $68 million. The project is carried out in 118 subdivisions.

Without the stipends, students' access to the examination for the secondary school certificate is limited to those who can afford examination fees, stationery, and private tutoring. The proportion of girls appearing at the examination was about one-third of the total 475,261 pupils in 1991. A stipend aimed at eligible girls that covers board fees, preparation for the examination, and stationery expenses encourages more girls to take the examination. Once they pass the examination, girls can qualify for further studies or obtain employment.

The stipend component of the program is funded at $42 million. The 7-year project aims to increase the secondary school enrollment of girls in about a quarter of the country by providing stipends for 1.5 million girl-years of secondary education. It covers the first 6 years of the 13-year government plan to assist female secondary education. The FSSAP has been implemented since January 1994. The package includes stipends for secondary school girls, salaries of additional secondary school teachers, occupational skills training for secondary-age girls leaving school, building of public awareness for education, school hygiene education and improvements in availability of latrines and tubewells, and institution building in the government agency responsible for secondary education.

The management structure of the entire project includes several loci of decisionmaking. An interministerial steering committee meets quarterly and formulates and reviews policy, expedites interministerial pol-

icy decisions, and resolves implementation problems. A consultative group meets once a month to review project issues and recommend actions. A project implementation unit headed by a female project director, appropriately assisted, develops work plans and budgets, coordinates and schedules technical assistance, coordinates and monitors activities, informs the Directorate of Secondary and Higher Education about implementation problems, recommends necessary interventions, and contracts technical assistance, services, studies, and training.

HOW THEY WORK. The subdivision project offices provide the essential linkages between the project implementation unit and the schools. They also promote activities to attract schools to sign the cooperation agreement and to help them implement the range of school-based activities. The subdivision project offices also experiment with strengthening the relationship between parent-teacher associations and the school management committees. They also convene the subdivision advisory committee for girls' education.

The school-level coordinator is nominated by the headmaster or headmistress of each project school and is the key person ensuring effective implementation and management cooperation at the school level. The coordinator helps girls with school-related and personal problems through guidance and counseling. The subdivision advisory committee for girls' education has been actively participating in the subdivisions in which the project operates. Its many duties include providing advice and guidance on project issues and promoting community involvement.

Stipends are paid directly to girls in two annual installments. A large-scale program establishes personal accounts in branches of a commercial bank, the Agrani Bank, in project subdistricts, and payments are deposited accordingly. The Agrani Bank was selected because of its experience with the school banking system in urban areas, its extensive network of branches in project subdivisions, and its high quality of counter service. The Agrani Bank recovers its costs in the interest accrued from holding the project special account. Involving the commercial Agrani Bank in this project brought it the support of the private sector and influential members of society.

In areas where there are several schools for girls, the girls are taken to the nearest bank or banks to establish personal accounts. There they receive a passbook designated for the project. Stipends are paid into girls' bank accounts, whereas tuition is paid into schools' bank accounts. Stipends are withdrawn from the bank in March and October, which are dry-season months suitable for traveling. The process of banking gives girls an opportunity to handle their own money and

become familiar with the banking system, and increases their mobility in the community.

To be eligible for stipends, parents must agree that their daughters will attend school for at least 75 percent of the school year, obtain at least second-class marks (45 to 59 percent) on final examinations, and remain unmarried until they earn the secondary school certificate.

The stipend amounts were determined on the basis of project preparation and subsequent consultations with the Ministry of Education. Beneficiaries live in rural areas (there are generally two subdivisions per district), which were identified on the combined basis of economic impoverishment, low female literacy, and low female attendance.

A monetary rather than any other type of incentive was selected to close the gender gap. The choice was based on three main factors. The first was a successful pilot activity, the Female Education Scholarship Project, operating since 1982 as a local initiative and assisted by the U.S. Agency for International Development (USAID), The Asia Foundation, and the Norwegian Agency for Development Cooperation. It provided a model for delivering stipends (funds for tuition and personal costs of education). The second factor was the findings from a household expenditure survey confirming the need to make available special support for female education. Finally, an experiment with eliminating tuition fees for girls provided the third factor.

Income criteria were considered early on in project design, but most rural residents were poor and unable to afford the cost of educating girls. Thus no criteria were needed. Also, the USAID-funded project ran into difficulties with income targeting. Excluding the daughters of somewhat better-off, influential community members resulted in a withdrawal of community support. Thus it was decided that any girl who successfully completed grade 5 would be automatically eligible to receive a stipend.

STIPEND LEVELS. Concerned about affordability, the Ministry of Education lowered stipend amounts in 1994 by about 30 percent from the original estimates for girls in grades 6–8, and by 14 and 18 percent for girls in grades 9 and 10. The rates were revised to cover from 30 to 54 percent of school expenses in grades 6–10 (compared with 44 to 66 percent in the original design), while still progressively increasing stipend levels through grades 6–10 to reflect both rising costs in upper grades and the need in upper grades for larger incentives to counteract dropout rates (a book allowance in grade 9 and examination fee in grade 10). Rates are equivalent to $12 in grade 6, $13.50 in grade 7, $15 in grade 8, $30.25 in grade 9, and $36.25 in grade 10. Stipends cover tuition, school fees, uniforms, shoes, umbrellas, snacks, kerosene, trans-

portation, and personal development fees. According to appraisal estimates, the annual direct cost of secondary education is about $54 per student. About 1.3 million girls in six cohorts were expected to receive stipends in the academic year 1994/95.

A monitoring and evaluation system was given high priority during project preparation and was set to become operational during the first academic year of project implementation. The project proved so popular that the government of Bangladesh decided to expand the stipend concept into a national female secondary stipend program in all 460 rural subdivisions. The government is assisting in 282 subdivisions (with its own funds), IDA in 118 subdivisions, the Asian Development Bank in 53 subdivisions, and the Norwegian Agency for International Development in 7 subdivisions. The government asked, and IDA agreed, to amend the project in 1994 to bring it into line with the national program. The national program is being implemented according to FSSAP parameters. A unified management information system is being developed, and initial outputs are now becoming available. The government recently announced that the program will expand into urban subdivisions.

One of the reasons for the success of this project is the involvement and support of beneficiaries. If the project did not compromise with influential community members by making stipends available to their daughters, it would have been doomed. The partnership established with beneficiaries allowed for the detection of this problem long before animosities became irreversible. Furthermore, from these consultations with beneficiaries the government of Bangladesh realized the need for a flexible approach involving periodic evaluation to determine the right amount of subsidy. Finally, this pilot grew out of a local initiative, which had much to do with its success and its expansion into a national program.

Community Financing: Chad

Community-based primary schools are extensive throughout Chad. Approximately 400 local communities have established primary schools, known as *écoles spontanées*, managed with almost no support from the central government. Community primary schools cover approximately 10 percent of primary enrollment nationwide. However, only 1 percent of students enrolled in écoles spontanées are enrolled in the last year of primary school. Approximately 90 percent of écoles spontanées students are enrolled in the first three years. It is notewor-

thy that even among the government-recognized primary schools, local Associations des Parents des Elèves (APE), or parent-teacher associations, assume major responsibility for financing school construction and maintenance, and employment of supplementary teachers. About 81 percent of Chadian primary schools receive community contributions, and 21 percent of schools are completely community-financed.

Chad faces a multitude of problems in its education sector. For example, there are severe financial constraints, which translate into low and inequitable access and very low quality (repetition rates averaged 35 percent at the primary level in academic year 1994/95). Compounding this problem is poor management and supervision. To tackle these problems, Chad developed an education strategy, the Education-Training-Employment (ETE) Strategy, for 1990–2000, which is supported by the project. The total credit amount for the project is $19 million from IDA and $5.6 million from the government of Germany.

The component of the project that aims to strengthen the management and organizational capacity of parent-teacher associations costs about $1 million. The objective is to improve the capacity of local communities to manage schools so as to increase quality and access. The parent-teacher associations are involved in important decisions, such as selecting teachers, building classrooms, and accessing the support of community schools. The implementation arrangement for the component was designed to be demand-driven. It is hoped that such measures will improve the efficiency and quality of primary education in the long run.

It is estimated that in academic year 1994/95 local communities, through their parent-teacher associations, contributed $1.4 million toward primary schooling, or about 47 percent of the nonsalary budget. Efforts of parent-teacher associations include the employment of 4,267 supplementary (not part of the civil service) teachers, about 48 percent of primary school teachers nationwide. Salary payments to community teachers vary widely, but on average community teachers receive $20 per month in cash or in-kind. The government's irregular payment of teachers' salaries is a serious issue. Salaries are at times up to eight months late, as are those of all civil servants. This problem is especially acute outside of N'djamena, the capital, and has led to widespread strikes and school closings. The situation is improving, however, primarily because of the disbursement of the structural adjustment credit which began in 1996.

School inspectors, directors, and staff of local NGOs are meant to have advisory and supervisory functions in this component. These NGOs provide courses in accounting, management, and functional literacy to help parent-teacher associations strengthen their management

resources and to address major education problems, such as low girls' enrollment.

The average size of each school-level grant is less than $2,000. The German aid organization, GTZ, in collaboration with the Ministry of Education's prefectoral delegations for education, coordinates this subcomponent, which manages its resources and selects local NGOs for implementing activities. These organizations are selected on the basis of their local experience and implementation capacity.

This project has two elements that are important in making it successful and sustainable. First, the training of officials and participants, and the strengthening of existing institutions are necessary for any implementation strategy. Training members of parent-teacher associations in financial management and institutional administration before channeling funds was critical in making the project work. The project works directly with parents, community members, schools, and ministry personnel who have been and will be the key players in improving the quality of schooling. Second, the project has effectively used a local NGO with experience in the sector.

Targeted Bursaries: China

Aggregate statistics in China do not reveal the wide disparities among regions and ethnic groups in schooling attainment. Although the government has established the nine-year compulsory education system in most large cities and coastal areas, many poor and remote areas are lagging behind. In almost all cases children in these areas have failed to complete even six years of primary education. Mostly national minorities inhabit the poor and remote areas. Historical, geographic, and cultural factors have ensured that the economic and education levels in minority areas remain lower than the national average. Income per capita in poor and minority areas is 2.6 times lower than the national average.

Remote areas suffer from insufficient, dilapidated, and dangerous school facilities. Large numbers of unqualified teachers with poor teaching materials contribute to high dropout and repetition rates. Unsatisfactory management and difficult access to schools compound the problem. A survey of 25 minority counties carried out by the State Education Commission cites that the gross enrollment rate of school-age minority children is about 20 percentage points lower than the national average and that female enrollment rates are particularly low. Bilingual education, regarded as instrumental in helping national

minorities advance to upper-secondary and postsecondary education, also suffers from many shortcomings. A shortage of qualified teachers and unsatisfactory instructional materials is a serious lapse, as is the insufficient attention given to research in the pedagogical, linguistic, and curriculum aspects of bilingual education.

The China Basic Education in Poor and Minority Areas Project, which covers six provinces and autonomous regions (Guangxi, Inner Mongolia, Jiangxi, Sichuan, Xinjiang, and Ningxia), aims to improve the delivery of basic education. It is receiving an IDA credit of $100 million. This project supports the attainment of universal primary education and the expansion of lower secondary education in poor and minority areas. One of the more important components is the support of book publishing and editing (especially in minority languages). Total project costs are $192 million, with the Chinese government contributing $92 million. The project is expected to benefit about 5 million children in poor and minority areas. In selecting project sites, greater weight was given to those communities with higher percentages of ethnic minorities.

The project seeks to expand access for minorities by financing the upgrading of facilities and equipment, and book procurement. The project also finances the development of bilingual textbooks and the training of bilingual teachers. In addition, the project created a Minority Education Training Center to focus on policy research and management training for minority education. Chinese language training for minority teachers is also financed, as are studies on effective teaching, learning technologies, and multigrade teaching geared to minorities, particularly girls.

Government policy recognizes the need to focus on minority areas in the effort to reduce poverty, particularly poverty caused by low educational outcomes, high grade repetition and dropout rates, and lower transition rates to secondary schools. The problem is particularly acute when one includes girls' substantially lower enrollment rates. Therefore, the government of China targets funds to support payment of school fees, books, meals in boarding schools, and transportation costs toward the poorer sections of the provinces. Free textbooks for poor children are also part of the government plan.

Targeted Bursaries: Mexico

Relatively low levels of human capital and the presence of widespread poverty stifle Mexico's economic and social progress. According to a

1989 survey 18 percent of the population lives below the poverty line (Psacharopoulos and others 1993). More than three-quarters of the extremely poor live in rural areas. This segment of the population has large families with the highest dependency ratios and the lowest education levels.

Primary education is provided through three distinct methods. The first includes regular primary education, serving 93 percent of students. The second covers indigenous education, addressing the needs of 46 ethnic groups in 23 states, serving 6.3 percent of pupils. The third is the National Council for Educational Development (CONAFE), designed to overcome the problem of building and staffing schools in the most remote rural areas, serving 1 percent of pupils.

Mexico has the largest indigenous population in Latin America, approximately 9 million. This figure amounts to about 8 percent of the national population. Nearly 78 percent of indigenous people live in only one-third of the country's municipalities. The problem is acute, as poorer states that have a greater concentration of poor and indigenous people are less able to supplement federal funding. Classrooms in these states have a severe shortage of inputs, including books for indigenous children.

This project covers 10 states and supports the government strategy of poverty alleviation by increasing investments in primary education. It focuses on the most disadvantaged states and areas within these states, thus addressing the needs of the poor and contributing to a more equitable distribution of educational and economic opportunities. It has sought concessions for minority and indigenous peoples, and targeted bursaries to effectively redress existing inequalities.

The total project cost is $617 million. The loan from the World Bank is $412 million, which will target bursaries to the poorest municipalities and therefore to indigenous children indirectly. The first and second education projects targeted four of the poorest states. However, since even the poorest states had municipalities at different levels of development, the efficiency of investment is being further maximized by focusing most project activities on the 511 poorest municipalities (out of a total 934) within the next 10 poorest states.

A special component in the project channels $125 million (22 percent of project cost) toward the education of indigenous children by providing for teacher training and incentives, textbooks, didactic materials, reading corners, and school construction, rehabilitation, and maintenance.

The special component's explicit targeting mechanism benefits indigenous areas. An estimated 31,900 indigenous teachers will be trained or will take part in the teacher incentives program. In total, 43 percent of the incentive recipients are indigenous teachers. Schools

serving largely indigenous children also benefit from construction, rehabilitation, and maintenance programs.

The Dirección General de Educación Indígena develops indigenous educational materials for reading corners in indigenous schools. Textbooks and materials are being developed in the 17 main indigenous languages spoken in the project areas, covering about 90 percent of all ethnic groups in the project states. Content for the books is gathered through ethnolinguistic field research. A participatory methodology for text design and various visual presentation and communication methods were also developed.

Indigenous language textbooks and materials for reading corners have been developed for six primary grades. A technical group, with a coordinator from the dirección and a state-level representative for each of the 17 languages, is responsible for the selection and preparation of the indigenous texts. Each indigenous group has a representative who heads a four-member working group that is directly responsible for developing the respective textbooks and other instructional materials. The Dirección coordinator supervises the work and ensures that the national educational norms are observed. Preliminary versions of textbooks, student workbooks, and teacher guidebooks for grades 1 and 2 were field tested on a pilot scale during the first project year. The results and recommendations of the field tests were incorporated into the final version of the guidebooks, which were then printed and distributed. About 126,000 textbooks, 126,000 student workbooks, and 5,000 guidebooks for bilingual teachers have been printed. The government has also implemented a methodology for teaching other languages not included in this project. Parents, the community, and students are involved in this venture. Books have been issued for four grades, and reading corners for all grades have been set up.

Voucher Schemes: Colombia

Although in recent years Colombia has progressed economically and socially, the country's achievements have not reached the whole population equally. There are immense disparities in almost all social indicators across regions, and between rural and urban areas. Per-student public spending at different educational levels in 1990 fits the general pattern of Latin American countries: it is skewed in favor of families with high incomes. In 1990 per-pupil spending was $62 for primary schooling, $125 for secondary, and $666 for higher. Pupils from higher income families are overrepresented in secondary and higher educa-

tion. Therefore, a greater portion of the allocation for education benefits the wealthier segments of the population.

The private sector is prominent in education. For example, in the 87 municipalities covered by the project, 2,124 secondary schools were private, compared with 1,248 that were public. The limited access to public schools is not a problem for families with higher incomes. Most of those families prefer private secondary education and are willing and able to pay for it. Poor families, on the other hand, do not have a choice. Public secondary school places are in short supply compared with primary school places. However, when access to public education is not available, poor families face a daunting problem. The painful choice is either to spend their extremely limited income on private secondary schooling or to let their children go without secondary schooling. About 14 percent of fifth grade students drop out of the system, a portion of whom would have gone to school if a public school place were available or private schooling were affordable.

In municipalities where low-income students do not have access to public secondary schools, they are at risk of dropping out of the education system. Therefore, this project provides vouchers for these students so that they may enroll in selected private schools that have excess capacity. The voucher program was inaugurated in 1991 as part of the decentralization process, which commenced in the 1980s and became part of Colombia's new constitution in 1991. The new constitution provides for the election of local officials and delineates the responsibility for the management of local affairs to 33 departments and territories, and approximately 1,000 municipalities. The constitution compels the central government to transfer an increasing share of budgetary resources to regional and local governments to help defray the cost of providing social services. The national government also offers cofinancing to local authorities to stimulate local investments in social services that have national importance. The expansion of secondary education and the improvement of its quality at the municipal level have gained prominence in the government's strategy.

The voucher program, which is cofinanced by the national government, was designed to offer municipalities a short-term, cost-effective, and efficient option for expanding access to secondary schooling. The program offers vouchers to low-income students. By using their vouchers, the students are able to attend private secondary schools that have excess classroom capacity.

The objective of this project is to increase access to secondary education for an estimated 90,000 primary school graduates and provide opportunities for secondary education for up to 22,000 students of low-income families. The project supplements the government's 25,000

vouchers by funding not more that 5,500 vouchers for the 87 municipalities in the project. With the use of these extra vouchers, local governments hope to make a dent in dropout rates.

Total project costs are $150 million. The voucher program cost $7.9 million for 1994–97, providing 55,000 vouchers. The government contribution is 80 percent of that and the municipalities' is 20 percent. The component seeking to expand access costs $8 million. It will fund 55,000 voucher-years through 1997 at an average annual cost of $143 per voucher-year at 1991 prices based on a projected 5 percent average dropout rate among voucher recipients.

DISTRIBUTING THE VOUCHERS. All vouchers are distributed among 87 pilot municipalities according to demand, with an upper limit determined for each municipality based on the total number of vouchers available annually. Each municipality is expected to program its requirement for vouchers within the framework of its secondary education plans and to verify both the demand and the availability of places in private secondary schools.

There are strict eligibility requirements for both students and secondary schools. Students must come from the lowest two socioeconomic strata, have graduated from a public school or a nonprofit private school, and be no older than 15. Private secondary schools are required to provide evidence of their ability to offer an acceptable standard of education. Such evidence includes a *bachillerato* degree–granting license (*licensia de aprobación*) issued by the secretary of education, and average test scores on the Instituto Colombiano para el Fomento de la Educación Superior examination for the previous two years that are at least equal to the average public and private school test scores (excluding the test sores of the elite private schools) in the municipality. New private schools not having the above qualifications must provide evidence of having an operating license (*licensia de funcionamiento*), a certified teaching staff, and health facilities deemed suitable by the secretary of education.

The National Ministry of Education has signed an agreement with each participating municipality setting forth the terms and conditions of the voucher, and the financial and administrative arrangements. Municipalities determine the number of vouchers required, certify that private schools meet the requirements for participation, and jointly monitor the progress of the program with the Institute of Educational Credit and Training. The Institute of Educational Credit and Training is paid 2.5 percent of the value of vouchers awarded for administrative costs related to meetings between students and schools, publicity efforts, implementing the voucher system, and monitoring the program. Upon approval of the municipal education plan, municipalities

work out implementation arrangements for the voucher subproject with the Institute of Educational Credit and Training. The Institute administers the current program under an agreement with the Central Mortgage Bank to manage the funds for vouchers. A national coordinating committee, with the vice-minister and representatives from the above institutions, provides guidance to the program.

PROCEDURE FOR PAYMENT. As a first step the Ministry of Education and the municipalities deposit the money allocated for the voucher program at the national branch of the Central Mortgage Bank. This money is equal to 80 percent of the total program cost. The participating municipalities contribute the remaining 20 percent of the cost of the vouchers. Both contributions are deposited at the same time. Next, the national branch of the Institute of Educational Credit and Training tells the national branch of the Central Mortgage Bank which cities and schools have been awarded vouchers so that regional branches of the bank can open accounts for private schools involved in the program. The Institute of Educational Credit and Training then distributes to parents a list of all schools in the city involved in the program. Finally, the participating schools in the program open an account at the regional office of the Central Mortgage Bank.

Students receive three receipts from the Institute of Educational Credit and Training, which they give periodically to the school directors to be cashed at the Central Mortgage Bank. The first receipt is given at the beginning of the school year to cover tuition and three monthly payments, the second receipt covers four monthly payments, and the final receipt covers three monthly payments. Students are able to transfer from one school to another at any of the payment intervals.

The sustainability of the voucher program depends on the commitment of participating municipalities to contribute their share of the total program cost. Unfortunately, however, some municipalities are not fulfilling their financial obligation. This negligence threatens the future education of thousands of students attending school on vouchers and places the full financial burden on the central government.

Assistance to Private Schools Serving Poor Children: Dominican Republic

The education sector in the Dominican Republic has experienced severe neglect in terms of coverage, quality, and efficiency. In 1991 only half of the children enrolled in public primary schools could

expect to complete the primary cycle, and less than one-quarter could expect to complete the eighth grade, the final year of basic education. The lowest participation and completion rates are found among the 65 percent of the population living in rural and poor urban dwellings. Most children attend public primary schools that lack the requisite space and materials.

Private schools, which are mostly urban, educate about 20 percent of primary students and 30 percent of lower-secondary students. These private schools have recently increased enrollments in response to the crisis in the public sector. Most of the 1,500 private primary and lower-secondary schools that operate in urban settings serve students from low-income families. Growth in private school enrollments, based on demand and parents' willingness to pay, maintained the relatively high enrollment ratio in basic education between 1985 and 1991. However, many of these schools serve lower-income students and are resource-constrained, making it difficult to offer education of acceptable qualit

Most private schools operate at a level of quality comparable to, c slightly better than, that in public schools. In 1994 the new national assessment shows scores of 71 and 63 percent for public school grades 4 and 8, and scores of 76 and 74 percent for children in private schools. However, nearly 800 private schools do not meet accreditation standards and lack trained teachers and other inputs. A few schools operate informally in areas that do not have public or recognized private schools. Information on these nonaccredited and informal schools collected during the implementation of the project suggests that they present a cost-effective means to expand and upgrade basic education, particularly in rapidly expanding poor urban areas.

In response to this problem the government's Ten-Year Education Plan (begun in 1990) ventures to strengthen private (as well as public) schools in an effort to improve the quality of basic education. Approximately 750 private institutions accredited by the Secretariat of Education, Arts and Culture participate in the Education Plan, which includes teacher training and the purchase of learning materials.

Total project cost is $100 million. The component discussed here seeks to help private schools catering to low-income students. The Pilot Program to Support Private Schools Assisting Low-Income Populations (costing $3.7 million) will initiate public support for private schools serving students from low-income families. It will be guided by the secretariat's Department of Private Schools but will be executed through local NGOs. The pilot reflects the government's understanding that the private sector is a good source for alleviating access-related issues.

One of the subcomponents of the project provides for school supplies and the expansion of preschool education places for children in

the poorest parts of districts. The selection of sites is measured by average income. Another subcomponent provides complementary school materials for all multigrade schools that are located in poor communities. Yet another subcomponent provides for the expansion of school feeding programs along the Haitian border and in marginal urban areas. The selection of sites is based primarily on updated data on the nutritional status of children, complemented by income data. A final subcomponent provides for the expansion and improvement of school facilities in the districts that rank among the poorest 40 percent. It also offers technical and financial assistance for private schools in poor urban areas serving children from families in the two lowest income quintiles.

To provide school inputs, the secretariat employs local NGOs with experience in community assistance to identify schools that need to be upgraded. Parent-teacher associations and school directors at these institutions prepare school development plans for review by the NGO and the Secretariat of Education. The schools receive the same inputs provided to public schools, such as school materials and supplies for students and teachers, and teacher training. In the case of private schools, however, facility improvements are limited to minor repairs and the provision of technical assistance in the use of ventilation, lighting, and maintenance.

The component for institutional support is put in place to ensure the effective implementation, monitoring, and followup of the technical assistance and training provided for the secretariat's Department of Private Schools. A new private school management information system is being strengthened and integrated into the current system in the secretariat. This will provide improved census and baseline educational data, and other related information to assist decisionmakers.

Criteria for assistance is based on the number of students transferring into private schools and not on the number of students in school. Although the project as a whole benefits all students attending public schools, the component of concern here targets children from low-income families in the areas that are least-well served—poor urban and rural areas.

Assistance to Private Schools Serving Poor Children: Pakistan

The Northwest Frontier Province of Pakistan has a literacy rate of 22 percent, which is about two-thirds the already low national average. In addition, this figure conceals severe inequities between districts, rural

and urban areas, and men and women. The literacy rate for men is 34 percent and that for women is 8 percent. The gross enrollment ratio also shows great disparities between boys and girls in the Northwest Frontier Province, at 71 and 36 percent.

The educational issues faced by the Northwest Frontier Province within the education system are limited access, particularly for girls, coupled with high dropout rates and a poor learning environment. Student achievement is poor because of teacher absenteeism, an inappropriate curriculum, poor textbooks, limited availability of supplementary learning materials, and weak teaching. Sectoral management is inefficient, and planning and budgeting capacities are weak. The unpredictable release of funds and inefficient operation and management of the primary education system make the situation worse.

Immediate improvement is needed in rural areas where school enrollment rates for girls are very low. Rural areas and girls' education have been neglected historically, partly because of the above factors and the inadequate supply of qualified, especially female, teachers. More than 40 percent of the 8,673 villages in the province lack a government girls' school, and a quarter lack a boys' school. Of the 20,317 government primary schools in the Northwest Frontier Province, only 4,395, or 22 percent, are for girls.

This project is part of the government's Social Action Program. The Primary Education Program is the education component of the Social Action Program in the province. The credit amount for this project is $150 million. The project ventures to improve access, equity, and efficiency in primary education, particularly for girls. It also seeks to improve the quality of the learning environment for all schools and to improve the organizational framework and planning, management, assessment, and monitoring capacity of the provincial education system. Finally, the project aims to increase village-level beneficiary involvement in all phases of primary education.

DIVERSITY OF MECHANISMS. The Frontier Education Foundation was created in 1993 by the provincial government to promote private education. It is headed by a managing director assisted by a technical and a financial manager, a legal adviser, and support staff. At the divisional level, regional committees are supported by offices with full-time coordinators and a secretarial staff who examine and comment on applications before they are submitted to the Frontier Education Foundation's headquarters.

The project supports the government's efforts to expand the private sector's involvement in education. It primarily subsidizes private schools catering to low-income populations and rural girls. The key

objective of the government is to underwrite the private sector's efforts to establish schools that serve low-income groups in urban and rural areas, where making a profit from tuition alone is not feasible.

The Frontier Education Foundation supports a series of pilots and components, including loans and grants to establish new schools, particularly in rural areas. Financial assistance is available to enable low-income urban pupils to attend private schools and to canvas and assist private donors willing to sponsor private schools. There is also support for research and development with a view to improving private school quality. In all these activities special emphasis is given to schools managed by communities. A number of studies are being carried out on private schools operating in rural and low-income urban areas, on parental willingness to pay for education, and on potential entrepreneurs and NGOs in this field.

The foundation will assist schools serving girls living in rural and urban slums. In these areas girls' schools and mixed schools with at least 50 percent female enrollment will qualify for the program. Schools assisted by the Frontier Education Foundation are registered as corporate bodies. Small community organizations (such as unregistered village education committees) qualify for the program by associating themselves with registered NGOs.

FUTURE OPERATIONS. Future prospects for the program may include loan-cum-grants to help establish private schools in rural areas and poor urban areas. They may also include assistance for establishing community schools in rural areas or poor urban areas. Other possible interventions include the provision of stipends or matching grants to low-income pupils and the design of a flexible operating mode to permit the Frontier Education Foundation to try different approaches and search for cost-effective interventions. It is also hoped that the Frontier Education Foundation will provide technical assistance, but not financial assistance, to schools catering to the population that is not disadvantaged.

The possible loan-cum-grants component will support the establishment of new schools by making available financial support covering half of the costs involved—25 percent as loans (three-year payback plan) and 25 percent as grants. This plan may work in urban areas but may not prove attractive enough to lure private entrepreneurs to rural areas, where the chances of making a profit are slim.

Considering the urgency of attracting investors to educationally deprived rural areas, the formula was adjusted to 50 percent loans and 20 percent grants, the remaining 30 percent to be provided by the investor. School construction may be financed after a probation of two years, during which school enrollment must be verified. Over the two-

year probation, partial financing of the operational costs of the school will be feasible.

A second possibility for the future is to assist private primary schools run by rural communities. The Frontier Education Foundation will help community organizations identify teachers acceptable to the education department and village education committees. A minimum of 25 girls must be willing to enroll before a village school for girls can be opened. The village organization is responsible for organizing a village education committee and ensuring the availability of a permanent site for the school and the payment of the teachers' salaries.

The third possibility is to fund a consortium of two to ten villages or to fund individual villages. Under the program a subsidy of $3 per female student would be made available directly to the village education committee for up to 25 female students per class to provide pooled grants of $83 per month for an initial three years. The limit of $83 per teacher per class is based on the current salary paid by the government to teachers in community schools. In reality the village education committee is allowed to spend only part of the $83 to pay teachers. It must use the rest for repairs and maintenance. If the village education committee has its own resources, it may choose to pay the teacher a higher salary. Teachers must have a certificate of matriculation with a minimum B– grade and must have met the qualification standard of the Frontier Education Foundation.

The village education committee, in agreement with the community, may decide to admit boys under conditions that no grants are made for boys, and that if girls are charged fees in addition to the subsidy, boys will have to pay the same or more. However, no more than 50 percent of students can be boys, and the maximum number in a classroom cannot exceed 50 students and may not fall below 15.

The stipends and matching grants program will in the future allow girls to attend private schools by giving them a stipend of $3. To this end, the Frontier Education Foundation has succeeded in gaining financial contributions from private banks.

Student Loans: Jamaica

In the 1970s and 1980s Jamaica went through a period of economic decline. By the end of the 1980s per capita GDP had fallen by about 20 percent in real terms, and inflation was running at more than 20 percent per year. The public sector was overextended, and the accumulated external debt was claiming more than half of public expenditures. To tackle this problem efficiently, the government in 1989 adopted a reform

program consisting of macroeconomic stabilization, structural adjustment, privatization, and rationalization of the public sector. An integral part of this adjustment process was the funneling of new funds to the social sectors through the establishment of the Human Resource Development Program.

The education sector has suffered from decreasing resource allocations. In real terms the government's allocation for education in 1994/95 was almost the same as in 1982/83. As a share of GDP, spending fell from 7 percent in 1981 to an estimated 4.7 percent for 1994/95. In 1992/93 the total enrollment in higher institutions was estimated to be 25,000 students, or about 9.5 percent of the age cohort. Access to higher education is limited by the small number of available places and the high cost of private education. Financial support for students attending tertiary institutions is provided through private financing (family, relatives, and personal savings), student loans, scholarships, targeted bursaries, and grants.

Since 1970 student loans have helped to meet the costs of tertiary education. A student revolving loan fund is operated by the government's Student Loan Bureau. Because of negative real interest rates, high default rates, and high administrative costs, the bureau soon found itself with a decapitalized revolving loan fund. In response to the inability of the Student Loan Bureau to meet the demand for student loans, a new, complementary student loan scheme was launched for the academic year 1993/94 under the auspices of the Jamaican Bankers' Association with the government's encouragement. The support of business groups was critical.

Under the government's arrangements students can finance only up to 40 percent of their costs. The insufficiency of these schemes probably prevents the poorest students from pursuing a tertiary education. As more students from less-advantaged families qualify to enter tertiary facilities, there will be a need to improve access. As the higher education system moves toward more diversified finance, students will increasingly demand flexible financial options to pay for their education, including scholarship programs based on both merit and need.

The project is a targeted student loan program for higher education. It provides Jamaican students (especially the neediest) with adequate financing options to pay for their share of higher education on an ongoing basis, ensures equitable access to tertiary education, and improves targeting. The program will also establish a scholarship fund for students least able to pay and will run a public awareness campaign to inform students and their families of policy changes with respect to cost recovery and options available through the expanded student loan scheme.

CAPITALIZING THE STUDENT LOAN SCHEME. The project will finance an injection of funds to expand the student loan scheme. It proposes to strengthen the commercial banks' ability to collect loans. The future role of the Student Loan Bureau will be to process loan applications, but all disbursements and collections will be handled by the main private commercial banks. The Student Loan Bureau will receive and review a consolidated loan and grant application form. Using this form, the bureau will determine the student's eligibility and gauge whether the student is in bona fide status. Once a substantial subsidy in the form of low interest rates is in place, the loans will be targeted to students from poorer backgrounds, about one-third of the tertiary student population. The Survey of Living Conditions will be used to determine eligibility. To this end, the applicant's projected education costs (tuition, books, and possibly a share of maintenance costs), and the education costs of siblings and dependents that are enrolled in secondary or tertiary institutions will be deducted from total income. Once eligibility is verified, the Student Loan Bureau will forward a recommendation to the financial institution chosen by the student that 100 percent of tuition fees be given as a loan. The financial institution will then direct the funds to the tertiary institution.

Subloans are consolidated by the financial institutions, which in turn obtain an intermediary loan from the Student Loan Bureau on conditions similar to those of student subloans. The government will act as a guarantor for all subloans in the event of death or disability while the student is in school and during the six-month grace period. A maximum of seven years is given for repayment. Commercial banks will charge a 3.5 percent administration margin and treat all student loans, whether guaranteed by the government or not, like any other commercial debt. For student loans under the full government guarantee, commercial banks will fulfill defined collection procedures before seeking compensation from the government.

Commercial banks may use several kinds of measures to minimize default, including salary deduction. In addition, banks may seek a disclosure waiver to release student names to credit bureaus when students sign promissory notes. The interest rate charged while the student is in school and during the grace period would be 15 percent annually, but capitalized. Once the repayment period begins, the rate will switch to the average savings rate plus 5 percentage points adjusted annually on January 1. The Student Loan Bureau will also reach an agreement with tertiary institutions that the funds be used efficiently and with care.

The Student Loan Bureau will be restructured to strengthen automated loan application processing, especially means testing and targeting. This change could reduce the time for completing degrees.

Liaison channels with the bureau and commercial banks will also be strengthened to facilitate flow of funds and track default rates.

FURTHER BENEFITS. Two other components are worth mentioning. The Student Loan Bureau works with the tertiary institutions to implement the public awareness campaign about the loan system. In addition, the bureau will run a targeted grant-in-aid program for full-time students at the University of the West Indies and the University of Technology, using the same procedure but reserved for the poorest segment of the population. For first-year, full-time students the grants will cover living expenses, which are considerably more than tuition and fees. In this case the total need per student is approximately $300. The University of the West Indies and the University of Technology will be consulted in the selection of second- and third-year students. These students will receive a maximum of 50 percent of housing and maintenance costs. The universities will handle the disbursements, and students will sign for their grants as they receive them.

Community Grants: Pakistan

Balochistan occupies almost half of the landmass of Pakistan but contains only about 5 percent of the country's 120 million people and has an average density of 16 people per square kilometer. About 84 percent of the inhabitants reside in rural areas in approximately 9,000 settlements. Almost all schools (91 percent) are outside the urban areas. The school participation rate is 34 percent. The province has the lowest gross enrollment rate in primary education. The female participation rate in primary education in Balochistan is only 15 percent.

Approximately 3,800 villages have no school. The problems are magnified several times and compounded by difficult geographic conditions. There is the usual lack of access, equity, and efficiency exacerbated by an inadequate learning environment. The situation is made especially critical by inadequate organization, planning, and management.

The province has implemented a $330 million project with an educational focus. The Balochistan Primary Education Program constitutes the educational component of the Social Action Program in this province. A credit of $106 million covers the total project. The program is overseen by the deputy director of (school) administration with support from a full-time local private education advisor and one support worker.

The component of interest here is the scholarship program for girls. Under the initial USAID-funded project offering scholarships for girls, known as the Primary Education Development program, a community provided the land and the initial school building, and ensured that the school was secure and operated effectively. Once the community and school proved their sustainability and commitment, the ownership of the land was transferred to the government of Balochistan to build a school, officially assign a teaching post, and provide mobile teacher training.

In 1993 the Society for Community Support for Primary Education in Balochistan, an NGO, was created to take over as the implementing agency under a contract with the government of Balochistan, the United Nations Children's' Fund (UNICEF), the World Bank, and other funding agencies. The Society has a good working relationship with the government of Balochistan.

RURAL FELLOWSHIP PROGRAM. While the initial program continues, two new pilot projects, one rural and one urban, have also been under way for about a year. These are known as the Rural and Urban Fellowship Programs.

For the Rural Fellowship Program the provincial government decided that instead of paying teachers' salaries directly, it would provide funds to the village education committee, which usually consists of five to seven fathers or mothers (there may be a male committee and a female committee) whose daughters attend the school. The village education committee administers the money and hires a teacher, preferably female, from within or outside the community. (A retired male teacher may be hired if the community finds him acceptable). These representative and beneficiary-led administrative groups are key to the success of this project. The community runs the school and must pay for school maintenance (utilities). It also contributes the land for the school. Schools will not become government schools. They will remain community run, owned, and managed.

The grant is given to the community, not directly to the girls. In the rural pilot, funds are provided to 30 schools on the basis of enrollment. The amount is about $100—one teacher's salary for one year for every 25 children (a minimum of 25 must enroll). An additional small grant is provided for books and other instructional materials.

A serious concern regarding accountability and monitoring of teachers and parents if scholarships were given to each parent led the government to decide to lump grants together into a single amount. There is one bank account per village, although different banks are used. The society manages checking accounts during a three-year probation period, after which the village education committee manages its own

account. The village education committee monitors teacher attendance and the Society monitors student attendance.

URBAN FELLOWSHIP PROGRAM. The Urban Fellowship Program focuses on using the private sector to provide education in poor urban areas with no government schools. This program supports the development of a private education sector that charges low tuition in poor urban areas, thus expanding the number of children the government can educate with its limited capacity for enrollment.

The poor areas of Quetta, the capital of Balochistan, were mapped and divided into 10 clusters, with a small neighborhood selected in each cluster. Quetta was chosen because it has more than 10 major ethnic groups, and it was necessary to ensure that all poor ethnic groups were targeted if they had no government schools available. Schools must have a minimum of 100 girls enrolled (as opposed to 25 in rural areas) to receive the full grant. The 10 selected schools essentially receive 100 grants each. A lump sum is given to the parent education committee to hire four teachers (at a ratio of 25 students per teacher). The parent committee then contracts (with government and nongovernmental assistance) with a private operator or NGO to establish and run a school. The private provider is guaranteed a minimum of 100 girls. Beyond this number, boys can enroll, but higher fees can be charged for boys and for girls from outside the neighborhood. The maximum grant is $600 per month for the first 12 months. Thereafter, it is reduced to $540 for the second year and $400 for the third year. There are also partial grants depending on enrollment. The money is guaranteed to the private operator for five years, as long as it satisfies the Parent Education Committee, which can fire the provider. Parents must still pay about $1 per child in urban areas and about $0.33 per child in rural areas. Eventually, willingness to pay will be addressed in terms of whether the fee structure prevents the poorest children from attending.

3
Lessons Learned

Formal evaluations are not available for most of the projects reviewed. However, there are case studies on Balochistan and Bangladesh with details on the evaluations (see Patrinos, Ariasingam, and Liang forthcoming). The Female Education Scholarship Program (FESP) in Bangladesh, which was funded by USAID, published results of evaluations. According to these evaluations the participating schools witnessed a sharp increase in female enrollment. In fact, the female enrollment rate was twice the male enrollment rate. The attendance rate for girls was also higher. Attendance rates were close to 80 percent in participating schools while in non-FESP schools the attendance rate was only 67 percent. There was also a general reduction in dropout rates among participating schools relative to nonparticipating schools. However, the program did not seem to have any effect on repetition rates.

Specific Recommendations

All of the projects reviewed here promote access, the main goal being increased schooling enrollment. In many cases efforts are being made to promote equity, for example, by targeting particular groups. Efficiency gains are another outcome indicator. Some projects use a demand-side mechanism to save money in providing schooling. And in most cases an attempt is made to improve the quality of schooling children receive.

The main lessons derived from this review are as follows:

- *Involvement and support of the beneficiaries.* Among the best approaches to implementing demand-side financing components in education projects, the involvement and support of beneficiaries stands out as the most important for viability and sustainability. Bangladesh is a case in point. Until a compromise was reached with influential community members by giving their children stipends (although they were not eligible under the initial regulations), the project was

doomed to failure. Communication with beneficiaries also helped determine the correct value of the stipend. The fact that the Bangladesh pilot grew out of a local initiative had much to do with its success and its being expanded into a national program.

- *Active participation of parents.* The active participation of parents is also a step in the right direction. In Balochistan, Pakistan, the creation of village education committees is the key factor in the success of that province's girls' scholarship program.
- *Involvement of the private sector.* When it comes to helping the government solve access problems, the involvement of the private sector can be a critical factor. In the Dominican Republic privately managed schools are allocated public funds to make them accessible to otherwise unreached children living at the periphery of urban settlements. In the Northwest Frontier Province Primary Education Program in Pakistan privately managed schools that serve girls and children from low-income families were supported to improve the situations of both groups.
- *Partnerships with commercial enterprises.* Partnerships with commercial enterprises can be critical in gaining support and resources for projects. In Bangladesh the Agrani Bank, with its expertise and good standing in the community, brought the support of the influential business sector. In Colombia it was the Central Mortgage Bank. In Jamaica the student loan scheme is backed by the Bankers' Association, which brings much-needed reform and credibility to the Student Loan Bureau.
- *Flexibility.* In designing a financial incentive program, a flexible approach that periodically evaluates the amount of the grant, subsidy, or stipend, given the needs of beneficiaries, allows for the desired impact. In Bangladesh the government varied the value of stipends by age in order to reduce dropout rates at the upper schooling levels.
- *Capacity building.* The training of officials and participants and the strengthening of existing institutions are necessary for any implementation strategy. In Chad parents involved in parent-teacher associations were trained in financial management and institutional administration. This practice was critical given the importance of parent-teacher associations in providing and financing primary schooling.
- *Participation.* To be effective in the field, openness to the use of local NGOs and private voluntary organizations to gain access to remote areas is a positive approach, especially when such groups have long-standing relations with a particular community and expertise in the sector. NGOs helped provide much-needed training in accounting,

management, and functional literacy to parents in parent-teacher associations in Chad.

- *Cultural relevance.* Many countries have groups within their borders that need special help to make education accessible and affordable. To this end, seeking concessions for minority and indigenous peoples, and promoting targeted bursaries can effectively redress existing inequalities. In Mexico it was reading corners, special teacher training for indigenous peoples, and school construction in relevant areas that made the program meaningful.
- *Equity.* In order to design and implement the provision of vouchers directly to the neediest students, many considerations related to regulation, finance, and information must be addressed. In Colombia attempts were made to ensure that only truly needy students would receive vouchers to attend private schools.
- *Transparency.* In designing capitation grants, clear, simple, and transparent formulas for the transfer of funds should be used. In the case of the Solomon Islands Third Education and Training Project (see Patrinos, Ariasingam, and Liang forthcoming) the government wants to create and implement a logical, transparent, and fair formula as the remedy to address inequalities and rationalize resources.

Disbursement and Monitoring

While subject to the same project implementation procedures as any other World Bank loan, demand-side financing projects are more complex. In particular, they face a unique set of disbursement and monitoring issues. The crucial question is how to monitor and deliver funds that effectively support demand.

Demand-side financing projects must have mechanisms to ensure that scholarship money, for example, reaches beneficiaries and is used for the intended purpose. In many World Bank–financed education projects with demand-side financing components, commercial banks, with a small NGO providing monitoring and reporting duties, are most frequently used for this purpose. Actual disbursement can be monitored through the bank accounts set up for beneficiaries.

Banks can also perform data processing functions required by the project implementation unit. They can provide the unit with disbursement summaries at regular intervals. This information can be used as part of the program monitoring system.

NGOs can be used to complement the reporting and monitoring system. These organizations serve as links between schools, project imple-

mentation units, and banks. They verify which students should receive subsidies, and follow up with the schools and banks. They report to the project implementation unit.

Need for Evaluation

Given that there is little experience in implementing demand-side financing components in education projects, it will take some time before we are able to determine the general usefulness of this approach. In the meantime, it is important to implement mechanisms in new projects or pilots that will evaluate the effectiveness of demand-side financing approaches. Most of the scholarship programs develop a management information system for tracking key indicators, such as enrollment, attendance, performance, repetition, dropout, promotion, graduation, and stipend payments. Very few, however, assess the impact of scholarship projects by comparing performance indicators of scholarship recipients and nonrecipients with similar characteristics. This neglect is largely due to the amount of effort required to collect data on students who are not receiving scholarships. But such an effort is crucial for real impact assessment.

References

Beales, Janet R. 1992 "Survey of Education Vouchers and their Budgetary Impact on California." Working Paper 144. Reason Foundation, Los Angeles.

Blaug, Mark. 1984. "Education Vouchers: It All Depends on What You Mean." In Julian Le Grand and Ray Robinson, eds., *Privatization and the Welfare State*. London: George, Allen, and Unwin.

Boyd, W. L., and C. T. Kerchner. 1988. *The Politics of Excellence and Choice in Education*. New York: Falmer Press.

Bray, Mark. 1996. *Decentralization of Education: Community Financing*. Directions in Development series. Washington, D.C.: World Bank.

Carvalho, Soniya. 1997. "Portfolio Improvement Program: Review of the Social Funds Portfolio." Poverty and Social Policy Department, Washington, D.C.: World Bank.

Chambers, J. G. 1985. "Patterns of Compensation of Public and Private School Teachers." *Economics of Education Review* 4(4): 291–310.

Cohn, Elchanan, and Terry G. Geske. 1990. *The Economics of Education*. New York: Pergamon Press.

Coleman, James S. 1992. "Some Points on Choice in Education." *Sociology of Education* 65(4): 260–62.

Doyle, Denis P. 1984. "Family Choice in Education: The Case of Denmark, Holland and Australia." National Institute of Education, Washington, D.C.

Fiske, Edward B. 1996. *Decentralization of Education: Politics and Consensus*. Directions in Development series. Washington, D.C.: World Bank.

Friedman, Milton. 1962. *Capitalism and Freedom*. Chicago: University of Chicago Press.

Friedman, Milton. 1995. "Public Schools: Make Them Private." Briefing Paper 23, Cato Institute, Washington, D.C.

Greene, Jay P., Paul E. Peterson, and Jiangtao Du (with Leesa Boeger and Curtis L. Frazier). 1996. "The Effectiveness of School Choice in Milwaukee: A Secondary Analysis of Data from the Program's Evaluation." Occasional Paper 96-3. Harvard Program in Education Policy and Governance, Harvard University, Cambridge, Mass.

Henig, Jeffrey R. 1994. *Rethinking School Choice: Limits of the Market Metaphor.* Princeton, N.J.: Princeton University Press.

Heyneman, Stephen P. Forthcoming. "Education Choice in Eastern Europe and the Former Soviet Union: A Review Essay." *Education Economics* 5(3).

Hoxby, Caroline Minter. 1996. "The Effects of Private School Vouchers on Schools and Students." In H. E. Ladd, ed., *Holding Schools Accountable.* Washington, D.C.: The Brookings Institution.

Krashinsky, M. 1986. "Why Educational Vouchers May Be Bad Economics." *Teachers College Record* 88(2): 139–51.

Levin, Henry M. 1980. "Educational Vouchers and Social Policy." In Bush Institute for Child and Family Policy, ed., *Care and Education of Young Children in America: Policy, Politics, and Social Science.* Norwood, N.J.: Ablex.

———. 1991. "The Economics of Educational Choice." *Economics of Education Review* 10(2): 137–58.

———. 1992. "Market Approaches to Education: Vouchers and School Choice." *Economics of Education Review* 11(4): 279–85.

Lott, John R. Jr. 1987. "Why Is Education Publicly Provided? A Critical Survey." *Cato Journal* 7(2): 475–501.

Murnane, R. 1986. "Comparison of Private and Public Schools: The Critical Role of Regulation." In D. C. Levy, ed., *Private Education: Studies in Choice and Public Policy.* New York: Oxford University Press.

OECD (Organization for Economic Cooperation and Development). 1985. *Reviews of National Policies for Education: Denmark Educating Youth.* Paris.

———. 1994. *School: A Matter of Choice.* Paris.

Patrinos, Harry Anthony, Lakshmanan Ariasingam, and Xiaoyan Liang. Forthcoming. "Demand-Side Financing in Education: An Operational Review." Human Development Department, World Bank. Washington, D.C.

Peterson, Paul E. 1990. "Monopoly and Competition in American Education." In William H. Clune, and John F. Witte, eds., *Choice and Control in American Education.* Vol. 1. New York: The Farmer Press.

Psacharopoulos, George, 1994 "Returns to Investment in Education: A Global Update." *World Development* 22 (9): 1325–43.

Psacharopoulos, George, and Harry Anthony Patrinos. 1994. *Indigenous People and Poverty in Latin America: An Empirical Study.* World Bank Regional and Sectoral Studies. Washington, D.C.

Psacharopoulos, George, Samuel Morley, Ariel Fiszbein, Haeduck Lee, and Bill Wood. 1993. "Poverty and Income Distribution in Latin America: The Story of the 1980s." World Bank, Latin America and the Caribbean Technical Department, Washington, D.C.

Rouse, Cecelia E. 1997. "Private School Vouchers and Student Achievement: An Evaluation of the Milwaukee Parental Choice Program." NBER Working Paper 5964. Cambridge, Mass.: National Bureau for Economic Research.

Sullivan, D. J. 1981. *Comparing Efficiency between Public and Private Schools*. Stanford, Calif.: Stanford University School of Education, Institute for Educational Research on Educational Finance and Governance.

Van der Gaag, Jacques. 1995. *Private and Public Initiatives, Working Together for Health and Education*. Directions in Development series. Washington, D.C.: World Bank.

West, Edwin G. 1991. "Public Schools and Excess Burden." *Economics of Education Review* 10(2): 159–69.

———. 1996. "Education Vouchers in Practice and Principle: A World Survey." Supplement to Human Capital Development Working Paper 64. World Bank, Washington, D.C.

Witte, John F. 1996. "Who Benefits from the Milwaukee Choice Program?" In B. Fuller and R. E. Elmore, eds., *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice*. New York: Teachers College Press.

World Bank. 1993a. "Bangladesh: Female Secondary School Assistance Project," Report No. 11386-BD. South Asia Region, Country Department I, Washington, D.C.

———. 1993b. "Chad: Basic Education Project," Report No. 11680-CD. Africa Region, Country Department III, Washington, D.C.

———. 1993c. "Colombia: Second Education Project," Report No. 11834-CO. Latin America and the Caribbean Region, Country Department III, Washington, D.C.

———. 1993d. "Pakistan: Balochistan Primary Education Program Project," Report No. 11403-PAK. South Asia Region, Country Department I, Washington, D.C.

——— 1994a. "China: Basic Education in Poor and Minority Areas Project," Report No. 13026-CHA. East Asia Region, Country Department II, Washington, D.C.

———. 1994b. "Mexico: Second Primary Education Project," Report No. 12529-ME. Latin America and the Caribbean Region, Country Department II, Washington, D.C.

———. 1995a. "Dominican Republic: Second Basic Education Development Project," Report No. 14963-DO. Latin America and the Caribbean Region, Country Department III, Washington, D.C.

———. 1995b. "Pakistan: Northwest Frontier Province Primary Education Program," Report No. 13432-PAK. South Asia Region, Country Department I, Washington, D.C.

———. 1995c. *Priorities and Strategies for Education: A Review.* Washington, D.C.: World Bank.

———. 1996. *The World Bank Participation Source Book.* Washington, D.C.: World Bank.

Young, Mary Eming. 1996. *Early Child Development: Investing in the Future.* Directions in Development series. Washington D.C.: World Bank.

Directions in Development

Begun in 1994, this series contains short essays, written for a general audience, often to summarize published or forthcoming books or to highlight current development issues.

Africa's Management in the 1990s and Beyond: Reconciling Indigenous and Transplanted Institutions

Building Human Capital for Better Lives

Class Action: Improving School Performance in the Developing World Through Better Health and Nutrition

Counting the Full Cost: Parental and Community Financing of Education in East Asia

Decentralization of Education: Community Financing

Decentralization of Education: Politics and Concensus

Deep Crises adn Reform: What Have We Learned?

Early Child Development: Investing in the Future

Financing Health Care in Sub-Saharan Africa through User Fees and Insurance

Global Capital Supply and Demand: Is There Enough to Go Around?

Implementing Projects for the Poor: What Has Been Learned?

Improving Early Childhood Development: An Integrated Program for the Philippines (with a separate supplement)

India's Family Welfare Program: Moving to Reproductive and Child Health Approach (with a separate supplement)

Investing in People: The World Bank in Action

Livable Cities for the 21st Century

Managing Commodity Booms — and Busts

Meeting the Infrastructure Challenge in Latin America and the Caribbean

(continued on the following page)

Directions in Development (*continued*)

Monitoring the Learning Outcomes of Education Systems

MIGA: The First Five Years and Future Challenges

Nurturing Development: Aid and Cooperation in Today's Changing World

Nutrition in Zimbabwe: An Update

Poverty Reduction in South Asia: Promoting Participation of the Poor

Private and Public Initiatives: Working Together for Health and Education

Private Sector Participation in Water Supply and Sanitation in Latin America

Reversing the Spiral: The Population, Agriculture, and Environment Nexus in Sub-Saharan Africa (with a separate supplement)

A Strategy for Managing Water in the Middle East and North Africa

Safety Net Programs and Poverty Reduction: Lessons from Cross-Country Experience

Taxing Bads by Taxing Goods: Pollution Control with Presumptive Charges

Toward Sustainable Management of Water Resources

Trade Performance and Policy in the New Independent States

The Transition from War to Peace in Sub-Saharan Africa

Unshackling the Private Sector: A Latin American Story

The Uruguay Round: Widening and Deepening the World Trading System

BEST COPY AVAILABLE